



CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory
NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

Job No.: CTCE/BBMP/WNo.15/KRIDL/WMM/Gradation/2015-16



06.04.2015

GRADATION FOR WMM MORTH TABLE-400-11

Client : Asst. Executive Engineer, T. Dasarahalli Sub Division, BBMP, Bangalore.
Agency : Technical Manager (West), KRIDL, Bangalore.
Name of Work : Providing asphaltting to Maheshwari Nagara 5th, 6th & 7th Cross Road in Dasarahalli Ward No. 15, T. Dasarahalli Sub Division, BBMP, Bangalore.
Reference : BBMP/DZ/AEE/TDSD/PR/2015-16 Dated: 04.04.2015
Date of Testing : 06.04.2015
Material : WMM
Sample Location : WMM Mix Plant **Oven Dry Wt (gm): 29470**

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits
53	0	0	0	100	100
45	1092	1092	3.7	96.3	95-100
22.4	7654	8746	29.7	70.3	60-80
11.2	5247	13993	47.5	52.5	40-60
4.75	4825	18818	63.9	36.1	25-40
2.36	3984	22802	77.4	22.6	15-30
0.600	2759	25561	86.7	13.3	8-22
0.075	2384	27945	94.8	5.2	0-8

Note:

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Signature
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ಬಿ.ದಾಸರಹಳ್ಳಿ ಉಪ-ವಿಭಾಗ
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06.04.2015

Aggregate Impact Value

IS: 2386 Part IV

Client	Asst. Executive Engineer, T. Dasarahalli Sub Division, BBMP, Bangalore.
Agency	Technical Manager (West), KRIDL, Bangalore.
Name of the Work	Providing asphaltting to Maheshwari Nagara 5th, 6th & 7th Cross Road in Dasarahalli Ward No. 15, T. Dasarahalli Sub Division, BBMP, Bangalore.
Reference	BBMP/DZ/AEE/TDSD/PR/2015-16 Dated: 04.04.2015
Source / Location	WMM Plant
Type of Mix	Wet Mix macadam
Date of Testing	06.04.2015



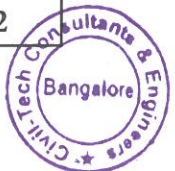
Sl No.	Details	Trial No.		Average
		1	2	
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	381	383	22.12
2	Weight of aggregate passing 2.36 mm sieve after the test = W_2 g	84	85	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	297	298	
4	Aggregate Impact value = percent fines	22.05	22.19	
	$100 * (W_2/W_1) \%$			

Comments:

→ Maximum allowable Aggregate Impact value for Wet mix Macadam is 30%

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 ವರ್ತಮಾನದ ಸ್ಥಿತಿ
 ಪರಿಶೀಲಿಸಿ, ದೃಢೀಕರಿಸಿ
 ಮುಖ್ಯಸ್ಥರು
 06.04.2015

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: 06.04.2015

DETERMINATION OF FLAKINESS INDEX & ELONGATION INDEX OF COARSE AGGREGATES

Client	: Asst. Executive Engineer, T. Dasarahalli Sub Division, BBMP, Bangalore.
Agency	: Technical Manager (West), KRIDL, Bangalore.
Name of Work	: Providing asphaltting to Maheshwari Nagara 5th, 6th & 7th Cross Road in Dasarahalli Ward No. 15, T. Dasarahalli Sub Division, BBMP, Bangalore.
Reference	: BBMP/DZ/AEE/TDSD/PR/2015-16 Dated: 04.04.2015
Technical Reference	: IS 2386(Part 1) 1963 (RA 2007)
Type of Mix	: Wet Mix Macadam
Date of Testing	: 06.04.2015



Result : Flakiness Index = 11.92%

Elongation Index = 13.74%

Result : Combined Flakiness & Elongation index

25.66%

Comments:

Maximum allowable Flakiness & Elongation Index for Wet Mix Macadam is 30%

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ಟಿ.ದಾಸರಹಳ್ಳಿ ಉಪ-ವಿಭಾಗ
ಬಾಸವೇಶ್ವರನಗರ, ಬೆಂಗಳೂರು
ದಿನಾಂಕ: 06.04.2015

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17.04.2015

BITUMEN DETERMINATION OF SEMI DENSE BITUMINOUS CONCRETE MIX

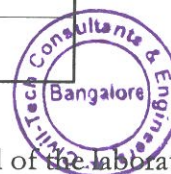
AS per IRC : SP : 11 - 1984

CLIENT	Asst. Executive Engineer, T. Dasarahalli Sub Division, BBMP, Bangalore.
AGENCY	Technical Manager (West), KRIDL, Bangalore.
NAME OF THE WORK	Providing asphaltting to Maheshwari Nagara 5th, 6th & 7th Cross Road in Dasarahalli Ward No. 15, T. Dasarahalli Sub Division, BBMP, Bangalore.
REFERENCE	BBMP/DZ/AEE/TDSD/PR/2015-16 Dated: 04.04.2015
SAMPLE I/D	Cross Roads in Maheshwarai Nagara, Ward No. 15
DATE OF TESTING	17.04.2015



BITUMEN CONTENT DETERMINATION

Description	Trail 1	Trail 2
1. Weight of Mixture before Test, g	500	500
2. Weight of Mixture after Test, g	475	475
3. Weight of Asphalt and Mineral matter Extracted, g	-	-
4. Weight of Mineral Matter, g.	-	-
5. Weight of Ash, g		
6. Weight of Bitumen Extracted, g. (corrected)	25.00	25.00
7. Bitumen content in %	5.00	5.00
8. Average	5.00	



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ಪೂರ್ವಾಭಿಮುಖ, ಬಿಸಿಎಂಐ
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17.04.2015

GRADATION DETERMINATION OF SEMI DENSE BITUMINOUS CONCRETE MIX

As per IS : 2386 and IRC : SP : 11 - 1984

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AGENCY	Technical Manager (West), KRIDL, Bangalore.
NAME OF THE WORK	Providing asphaltting to Maheshwari Nagara 5th, 6th & 7th Cross Road in Dasarahalli Ward No. 15, T. Dasarahalli Sub Division, BBMP, Bangalore.
REFERENCE	BBMP/DZ/AEE/TDSD/PR/2015-16 Dated: 04.04.2015
SAMPLE I/D	Cross Roads in Maheshwarai Nagara, Ward No. 15
DATE OF TESTING	17.04.2015



GRADATION AFTER EXTRACTION

Sieve Size in mm	Trail 1				Specified Limits as per MORTH specification table 500-15 (Grading-2)
	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	
13.2	0	0	0	100	100
9.5	26.13	5.50	5.50	94.50	90-100
4.75	245.89	51.77	57.27	42.73	35-51
2.36	52.16	10.98	68.25	31.75	24-39
1.18	51.74	10.89	79.14	20.86	15-30
0.3	26.15	5.51	84.65	15.35	9-19
0.075	42.28	8.90	93.55	6.45	3-8

Sieve Size in mm	Trail 2				Specified Limits as per MORTH specification table 500-15 (Grading-2)
	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	
13.2	0	0	0	100	100
9.5	33.89	7.13	7.13	92.87	90-100
4.75	256.92	54.09	61.22	38.78	35-51
2.36	52.15	10.98	72.20	27.80	24-39
1.18	37.54	7.90	80.11	19.89	15-30
0.3	26.18	5.51	85.62	14.38	9-19
0.075	41.96	8.83	94.45	5.55	3-8

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ಬಿ.ವಾಸವರ್ಧನ್, ಉಪ-ನಿರ್ದೇಶಕರು
ಪ್ರಾ.ಪ್ರಾ.ಪ್ರಾ. ಬಿ.ವಾಸವರ್ಧನ್

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